

2. A transformer as claimed in claim 1 wherein said transformer is adapted to be operated at an optimum frequency, said optimum frequency being a frequency at which an impedance of a transformer equivalent circuit of said transformer is a maximum.

3. A transformer as claimed in claim 1 wherein said transformer is adapted to be operated at a frequency of between 300 kHz and 20 MHz.

4. A transformer as claimed in claim 1 wherein said transformer is adapted to be operated by a high-frequency carrier signal modulated by a low-frequency switching signal.

5. A transformer as claimed in claim 4 wherein said carrier signal is at an optimum frequency, said optimum frequency being a frequency at which an impedance of said transformer is a maximum.

6. A transformer as claimed in claim 1 further comprising means for adjusting a resonant frequency of the transformer.

24. A coreless printed circuit board transformer comprising first and second windings deposited on a printed circuit board, said second winding being deposited on a side of said circuit board that is opposed to a side of said circuit board whereon said first winding is deposited said transformer further comprising means for adjusting a resonant frequency of the transformer.

26. A coreless printed circuit board transformer comprising first and second windings deposited on a printed circuit board, said second winding being deposited on a side of said circuit board that is opposed to a side of said circuit board whereon said first winding is deposited, wherein said transformer is adapted to be operated at an optimum frequency, said optimum frequency being a frequency near a frequency at which an impedance of a transformer equivalent circuit is at a maximum.

Sub 37 27. A transformer as claimed in claim 26 wherein said transformer is adapted to be operated at a frequency of from 100 kHz to at least 20 MHz.

28. A transformer as claimed in claim 26 wherein said transformer is adapted to be operated by a high-frequency carrier signal modulated by a low-frequency switching signal, said carrier signal being at a frequency corresponding to a maximum impedance of the transformer.

29. A transformer as claimed in claim 28 wherein said carrier signal is at a frequency of from 100 kHz to at least 20 MHz and said switching signal is at a frequency of between DC and 300 kHz.

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27. A transformer as claimed in claim 2 wherein said transformer is adapted to be operated at a frequency of from 100 kHz to at least 20 MHz.

29. A transformer as claimed in claim 4 wherein said carrier signal is at a frequency of from 100 kHz to at least 20 MHz and said switching signal is at a frequency of between DC and 300 kHz.

Please add claims 36-46 as follows.

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Sub 47 36. A transformer as claimed in claim 1 wherein said transformer is adapted to be operated at an optimum frequency, said optimum frequency being a frequency at which an impedance of said transformer is a maximum.

37. A transformer as claimed in claim 2 wherein said optimum frequency is between 300 kHz and 20 MHz.

38. A transformer as claimed in claim 4 wherein said carrier signal is at an optimum frequency, said optimum frequency being a frequency at which an impedance of a transformer equivalent circuit of said transformer is a maximum.

SubCS 7/16 39. A transformer as claimed in claim 2 further comprising means for adjusting said optimum frequency.

40. A transformer as claimed in claim 36 further comprising means for adjusting said optimum frequency.

41. A transformer as claimed in claim 5 further comprising means for adjusting said optimum frequency.

42. A transformer as claimed in claim 38 further comprising means for adjusting said optimum frequency.

43. A transformer as claimed in claim 39 wherein said adjusting means comprises a variable capacitance connected across the second winding.

44. A transformer as claimed in claim 40 wherein said adjusting means comprises a variable capacitance connected across the second winding.

45. A transformer as claimed in claim 41 wherein said adjusting means comprises a variable capacitance connected across the second winding.

46. A transformer as claimed in claim 42 wherein said adjusting means comprises a variable capacitance connected across the second winding.

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